AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A compound of the formula I:

$$\begin{array}{c|c} R_4 & R_3 & R_2 \\ R_5 & 5 & 6 & 1 \\ \hline R_6 & & & & & \\ \end{array} \qquad \begin{array}{c} OR_7 \\ OR_1 \\ OR_1 \\ \end{array}$$

or a pharmaceutically acceptable salt thereof;

wherein X and Y are independently selected from the group consisting of O, CF₂, CH₂, and CHF;

wherein A is P(O)OH;

R₂ is selected from the group consisting of H, OH, C₁-C₂₅ alkyloxy, C₆-C₁₀ aryloxy, C₃-C₈ cycloalkyloxy, C₃-C₈ cycloalkyl C₁-C₆ alkoxy, C₂-C₂₂ alkenyloxy, C₃-C₈ cycloalkenyloxy, C₇-C₃₂ aralkyloxy, C₇-C₃₂ alkylaryloxy, C₉-C₃₂ aralkenyloxy, and C₉-C₃₂ alkenylaryloxy; R₃-R₆ are independently selected from the group consisting of H and OH; and R₁ and R₇ are independently selected from the group consisting of C₁-C₂₅ alkyl, C₆-C₁₀ aryl, C₃-C₈ cycloalkyl, C₂-C₂₂ alkenyl, C₃-C₈ cycloalkenyl, C₇-C₃₂ aralkyl, C₇-C₃₂ alkylaryl, C₉-C₃₂ aralkenyl, and C₉-C₃₂ alkenylaryl;

with the provisos that (i) when X is O, Y is O or CH₂, and R₃ is H, at least one of R₂ and R₄-R₆ is not OH; (ii) all of R₂-R₆ are not simultaneously H; (iii) R₅ and R₄ are not simultaneously H; [[and]] (iv) R₂, R₃, R₅, and R₆ are not simultaneously OH or H; and (v) when X and Y are O, R₁ is C₁₈H₃₇, and only one of R₂ and R₆ is OCH₃, then R₃ and R₅ are not simultaneously OH.

2. (Canceled)

3. (Previously Presented) The compound of claim 1, which has the formula Ia:

$$\begin{array}{c|c}
R_4 & \stackrel{4}{\downarrow} & \stackrel{3}{\downarrow} & \stackrel{2}{\downarrow} & X & OH & QR_7 \\
R_5 & \stackrel{6}{\downarrow} & \stackrel{1}{\downarrow} & & & OR
\end{array}$$
(Ia).

4. (Previously Presented) The compound of claim 1, which has the formula Ib:

$$\begin{array}{c|c}
R_4 & \stackrel{4}{\cancel{\smash{\big)}}\cancel{\mathbin{\big)}}\cancel$$

- 5. (Currently Amended) The compound of claim 1, wherein X and Y are O.
- 6. (Previously Presented) The compound of claim 1, wherein R_1 is a C_1 - C_{25} alkyl.
- 7. (Previously Presented) The compound of claim 1, wherein R_1 is a C_{10} - C_{25} alkyl.
- 8. (Previously Presented) The compound of claim 1, wherein R_1 is a C_{15} - C_{20} alkyl.
- 9. (Previously Presented) The compound of claim 1, wherein R_1 is a C_{18} alkyl.
- 10. (Previously Presented) The compound of claim 1, wherein R₇ is a C₁-C₂₅ alkyl.
- 11. (Previously Presented) The compound of claim 1, wherein R₇ is a C₁-C₁₅ alkyl.
- 12. (Previously Presented) The compound of claim 1, wherein R₇ is a C₁-C₅ alkyl.
- 13. (Previously Presented) The compound of claim 1, wherein R_7 is methyl.
- 14. (Previously Presented) The compound of claim 1, wherein R₂ is C₁-C₂₅ alkyloxy.
- 15. (Previously Presented) The compound of claim 1, wherein R₂ is C₁-C₁₅ alkyloxy.

- 16. (Previously Presented) The compound of claim 1, wherein R_2 is C_1 - C_5 alkyloxy.
- 17. (Previously Presented) The compound of claim 1, wherein R₂ is methoxy.
- 18. (Previously Presented) The compound of claim 1, wherein R₂ is C₇-C₃₂ aralkyloxy.
- 19. (Previously Presented) The compound of claim 1, wherein R₂ is cyclohexylmethoxy.
- 20. (Previously Presented) The compound of claim 1, wherein R₂ is H.
- 21. (Previously Presented) The compound of claim 1, wherein R₃ is H.
- 22. (Previously Presented) The compound of claim 1, wherein R₄ is H.
- 23. (Previously Presented) The compound of claim 1, wherein R₅ is H.
- 24. (Previously Presented) The compound of claim 1, wherein R₆ is H.
- 25. (Previously Presented) The compound of claim 1, wherein R₂ and R₃ are H.
- 26. (Previously Presented) The compound of claim 1, wherein R₃ and R₄ are H.
- 27. (Previously Presented) The compound of claim 1, wherein R₅ and R₆ are H.
- 28. (Original) The compound of claim 3, wherein X and Y are O, R_1 is $C_{18}H_{37}$, and R_7 is methyl.
- 29. (Original) The compound of claim 28, wherein R_2 is methoxy, R_3 is H, and R_4 - R_6 are OH.
- 30. (Original) The compound of claim 28, wherein R₂-R₃ are H and R₄-R₆ are OH.
- 31. (Currently Amended) The compound of claim 28, A compound of the formula:

$$\begin{array}{c|c} R_4 & \stackrel{4}{\xrightarrow{4}} & \stackrel{3}{\xrightarrow{3}} & \stackrel{2}{\xrightarrow{2}} & X & OH & OR_7 \\ \hline R_5 & \stackrel{5}{\xrightarrow{5}} & \stackrel{6}{\xrightarrow{1}} & & OR_1 \\ \hline R_6 & & O & & O \end{array}$$

wherein X and Y are O, R_1 is $C_{18}H_{37}$, and R_7 is methyl; and R_2 - R_3 and R_5 - R_6 are OH and R_4 is H.

- 32. (Original) The compound of claim 28, wherein R_2 is i-butyloxy, R_3 is H, and R_4 - R_6 are OH.
- 33. (Original) The compound of claim 28, wherein R_2 is cyclohexylmethoxy, R_3 is H, and R_4 - R_6 are OH.
- 34. (Currently Amended) The compound of claim 28, A compound of the formula:

wherein \underline{X} and \underline{Y} are \underline{O} , $\underline{R_1}$ is $\underline{C_{18}H_{37}}$, $\underline{R_7}$ is methyl, $\underline{R_2}$ - $\underline{R_3}$ and $\underline{R_6}$ are \underline{OH} , and $\underline{R_4}$ - $\underline{R_5}$ are \underline{H} .

- 35. (Original) The compound of claim 28, wherein R₂-R₄ and R₆ are OH and R₅ is H.
- 36. (Original) The compound of claim 28, wherein R_2 , R_4 , and R_6 are OH and R_3 and R_5 are H.
- 37. (Previously Presented) A pharmaceutical composition comprising a compound of claim 1 and a pharmaceutically acceptable carrier.
- 38. (Previously Presented) A method of inhibiting activation of the serine/threonine kinase Akt or decreasing phosphorylation in a tumor cell of an animal comprising administering to the animal an effective amount of a compound of claim 1.

39-52. (Canceled)

- 53. (Previously Presented) A method of increasing apoptosis of a cell comprising contacting the cell with a compound of claim 1.
- 54. (Previously Presented) A method for inhibiting PH domain binding comprising exposing a material containing an PH domain to a compound of claim 1.
- 55. (Previously Presented) A method for determining the presence of a PH domain in a material comprising:
- (a) exposing a sample of said material to a PH domain binding compound and obtaining a first binding result;
- (b) exposing another sample of said material to a compound of claim 1 and obtaining a second binding result; and
- (c) comparing the first and second binding results to determine whether a PH domain is present in the material.
- 56. (Currently Amended) A method of treating cancer in a mammal comprising administering to the mammal an effective amount of a compound of claim 1, wherein the cancer is selected from the group consisting of lung cancer, breast cancer, ovarian cancer, colorectal cancer, and brain cancer.
- 57. (Canceled)
- 58. (Currently Amended) A compound of the formula I:

$$\begin{array}{c|c}
R_4 & \stackrel{4}{\cancel{\smash{\big)}} \cancel{\smash{\big)}} \cancel{\smash{\big)}}$$

or a pharmaceutically acceptable salt thereof;

wherein X and Y are independently selected from the group consisting of O, CF₂, CH₂, and CHF;

wherein A is <u>P(O)OH</u>; independently selected from the group consisting of P(O)OH, CHCOOH, and C(COOH)₂;

 R_2 is selected from the group consisting of C_1 - C_{25} alkyloxy, cyclohexylmethoxy, and C_7 - C_{32} aralkyloxy;

 R_3 - R_6 are independently selected from the group consisting of H, OH, isosteres of OH; and R_1 and R_7 are independently selected from the group consisting of C_1 - C_{25} alkyl, C_6 - C_{10} aryl, C_3 - C_8 cycloalkyl, C_2 - C_{22} alkenyl, C_3 - C_8 cycloalkenyl, C_7 - C_{32} aralkyl, C_7 - C_{32} alkylaryl, C_9 - C_{32} aralkenyl, and C_9 - C_{32} alkenylaryl;

with the provisos that (i) when X is O, Y is O or CH₂, and R₃ is H, at least one of R₂ and R₄-R₆ is not OH; (ii) when A is CHCOOH or C(COOH)₂, X and Y cannot be simultaneously O; and (iii) all of R₂-R₆ are not simultaneously H; and when X and Y are O, R₁ is $C_{18}H_{37}$, and only one of R₂ and R₆ is OCH₃, then R₃ and R₅ are not simultaneously OH.

- 59. (Previously Presented) The compound of claim 58, wherein R_2 is C_1 - C_{25} alkyloxy.
- 60. (Previously Presented) The compound of claim 58, wherein R₂ is C₇-C₃₂ aralkyloxy.
- 61. (Previously Presented) The compound of claim 58, wherein R₂ is cyclohexylmethoxy.
- 62. (Previously Presented) The compound of claim 58, wherein R₃ and R₄ are H.
- 63. (Previously Presented) The compound of claim 58, which has the formula Ia:

$$\begin{array}{c|c}
R_4 & \stackrel{4}{\downarrow} & \stackrel{3}{\downarrow} & \stackrel{2}{\downarrow} & X & OH & OR_7 \\
R_5 & \stackrel{5}{\downarrow} & \stackrel{6}{\downarrow} & \stackrel{1}{\downarrow} & OR_1 \\
R_6 & O & O
\end{array}$$

(Ia)

wherein X and Y are O, R_1 is $C_{18}H_{37}$, R_7 is methyl, R_2 is methoxy, R_3 is H, and R_4 - R_6 are OH.

64. (Previously Presented) A method of increasing apoptosis of a cell comprising contacting the cell with a compound of claim 58.

- 65. (Previously Presented) A method for inhibiting PH domain binding comprising exposing a material containing an PH domain to a compound of claim 58.
- 66. (Previously Presented) A pharmaceutical composition comprising a compound of claim 58 and a pharmaceutically acceptable carrier.
- 67. (Currently Amended) A method of treating cancer in a mammal comprising administering to the mammal an effective amount of a compound of claim 58, wherein the cancer is selected from the group consisting of lung cancer, breast cancer, ovarian cancer, colorectal cancer, and brain cancer.
- 68. (Previously Presented) A method of inhibiting activation of the serine/threonine kinase Akt or decreasing phosphorylation in a tumor cell of an animal comprising administering to the animal an effective amount of a compound of claim 58.
- 69. (Canceled)
- 70. (New) A pharmaceutical composition comprising a compound of claim 31 and a pharmaceutically acceptable carrier.
- 71. (New) A pharmaceutical composition comprising a compound of claim 34 and a pharmaceutically acceptable carrier.